

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.(Currently Amended) A method for removing contaminant particles (14), such as atoms, molecules, clusters, ions and the like, produced by means of a radiation source (40) during generation of short-wave radiation (42) having a wavelength of up to approximately 20 nm, by means of the method comprising the act of:

guiding a first gas (22) guided at high mass throughput at a first side of a particle trap arranged in a wall of a chamber between the radiation source (40) and a the particle trap (20) arranged in a wall (16) of a mirror chamber (18), characterized in that:

introducing a second gas (24) is introduced into the mirror chamber (18) at a second side of the particle trap, wherein the first side is different from the second side; and in that
its

adjusting a pressure is adjusted such that it is of the second gas to be at least as high as the a pressure of the first gas (22).

2.(Currently Amended) The method according to claim 1, ~~characterized in that~~
wherein the adjusting act adjusts the pressure of the second gas (24) ~~is adjusted such that~~
~~it is to be~~ higher than the pressure of the first gas (22).

3.(Currently Amended) The method according to claim 1, ~~characterized in that~~
wherein the guiding act guides the first gas (22) ~~is guided transversely to the a~~ propagation
direction of the radiation (12) in a channel (26) that is at least partially laterally bounded.

4.(Currently Amended) The method according to claim 1, ~~characterized in that~~
wherein the first gas comprises a noble gas having an atomic weight of at least 39 g/mol;
~~for example, argon or krypton, is used as a first gas (22).~~

5.(Currently Amended) The method according to claim 1, ~~characterized in that~~
wherein the second gas comprises a substance that is substantially transparent for the
radiation (12); ~~for example, the second gas including~~ helium or hydrogen, ~~is introduced as a~~
~~second gas (24).~~

6.(Currently Amended) The method according to claim 1, ~~characterized in that~~
further comprising the act of adjusting a flow velocity of the first gas (22) and/or of the
second gas (24) ~~is adjusted by means of appropriate devices (P, P', 28, 28').~~

7.(Currently Amended) A device for removing contaminant particles (14), such as atoms, molecules, clusters, ions and the like, produced by means of a radiation source (10) during generation of short-wave radiation (12) having a wavelength of up to approximately 20 nm, by means of comprising:

a chamber configured to receive a device to be protected against soiling with the contaminant particles;

a particle trap arranged in a wall of the chamber, wherein a first gas (22) that is guidable at high mass throughput at a first side of the particle trap between the radiation source (10) and a the particle trap (20) arranged in a wall (16) of a mirror chamber (18), characterized in that; and wherein a second gas (24) is introducible into the mirror chamber (18) whose at a second side of the particle trap, wherein the first side is different from the second side; and

an adjustor configured to adjust a pressure is adjustable with suitable devices (28, 28', P, P') of the second gas at the second side of the particle trap to be at least as high as the a pressure of the first gas (22) at the first side of the particle trap.

8.(Currently Amended) The device according to claim 7, characterized in that wherein the adjustor is further configured to adjust the pressure of the second gas (24) is adjustable by means of the devices (28, 28', P, P') to be higher than the pressure of the first

gas (22).

9.(Currently Amended) The device according to claim 7, ~~characterized in that~~ further comprising a channel for guiding the first gas (22) ~~is guidable transversely to the~~ propagation direction of the radiation (12) ~~by a~~, wherein the channel (26) that is at least partially laterally bounded.

10.(Currently Amended) The device according to claim 7, ~~characterized in that~~ wherein the first gas (22) is comprises a noble gas having an atomic weight of at least 39 g/mol, ~~for example, argon or krypton.~~

11.(Currently Amended) The device according to claim 7, ~~characterized in that~~ wherein the second gas (24) is comprises a substance that is essentially transparent for the radiation (12), ~~for example, the second gas including~~ helium or hydrogen.

12.(Currently Amended) The device according to claim 7, ~~characterized in that~~ wherein a flow velocity of the first gas (22) and/or of the second gas (24) is adjustable by means of appropriate devices ~~(P, P', 28, 28')~~.

13.(Currently Amended) ~~Lithography~~ A lithographic projection apparatus comprising

a device according to claim 7.

14.(Currently Amended) The use of the method according to claim 1, for generating radiation (12)-in a wavelength range of approximately 2 nm up to approximately 20 nm for a lithography device.

15.(Currently Amended) The use of the method according to claim 1, for generating radiation (12)-in a wavelength range of approximately 2 nm up to approximately 20 nm for a microscope.

16.(New) The method of claim 1, wherein the act of introducing the second gas prevents the first gas from flowing through the particle trap from the first side to the second side.

17.(New) The method of claim 1, further comprising the act of introducing the first gas from a first source at the first side of the particle trap, wherein the act of introducing the second gas introduces the second gas from a second source at second first side of the particle trap.

18.(New) The device of claim 7, wherein the second gas prevents the first gas from

flowing through the particle trap from the first side to the second side.

19.(New) The device of claim 7, further comprising:

a first source at the first side of the particle trap for introducing the first gas at the first side of the particle trap; and

a second source at the second side of the particle trap for introducing the second gas at the second side of the particle trap.